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DEVELOPING AND IMPROVING DISTRIBUTION STATISTICS

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DEVELOPING AND IMPROVING DISTRIBUTION STATISTICS

Introduction

1. The distributive trades and services sector plays an important part in the economic activity in every African country, both in terms of its contribution to gross domestic product and as a source of employment of labour. In most of these countries there has been a mass exodus of labour from the rural into the urban areas, and much of this labour is taken up in the distributive trade and services sector. In terms of its contribution to gross domestic product, the sector has been growing. From 20.6 per cent in 1970, the sector contributed 23.6 per cent of developing Africa's domestic product in 1984, with an average annual contribution of 22.6 per cent in the period 1970-1984.

2. In spite of its importance as a basis for assessing trends in the economy, designing and evaluating development programmes, and as a target group for fiscal and taxation measures, not much is known about the sector. One reason for this is that the sector's activities are not usually the subject of central attention in a number of African countries. Distributive-trades are widely scattered within a country and perform the very important role of channelling goods from the producer to the consumer.

3. This paper puts forward suggestions for developing and improved statistics of the sector and in particular the collection of data from the small scale and unorganized units within it.

Statistics on distribution

4. According to information available in the secretariat, very few African countries have conducted comprehensive surveys or censuses on distrubution. Countries which have conducted such inquiries have done so on a spasmodic basis and not only is there no regular and systematic flow of data on distributive-trade and services, but also a system or machinery for such data flow simply does not exist in some of the countries.

Scope

5. Activities which fall within the distribution and services sector are defined by ISIC groups as follows.

ISIC group	Activity
6100	Wholesale trade
6200	Retail trade
6310	Restaurants, cafés and other eating and drinking places

ISIC Group	Activity
6320	Hotels, rooming houses, camps and and other lodging places
8310	Real estate
8323	Data processing and tabulating services
8325	Advertising services
8330	Machinery and equipment rental and leasing
9411	Motion picture production
9413	Radio and television broadcasting
9414	Theatrical producers and entertainment services
9511	Repair of foot-wear and other leather goods
9512	Electrical repair shops
9513	Repair of motor vehicles and motorcycles
9514	Watch, clock and jewellery repair
9519	Other repair shops n.e.c.
9520	Laundries, laundry services, and cleaning and dyeing plants
9591	Barber and beauty shops
9592	Photographic studios, including commercial photography

Statistical units

6. The International Recommendations on Statistics of The Distributive Trades and Services 1/ states that "the statistical unit, that is the entity for which the required items of data are gathered should ideally be the establishment or the establishment-type unit " By "establishment" is meant shop, office or any other single location at which a combination of resources and activities is directed by one ownership in carrying out one kind or other of the activities listed above. The establishment may include associated auxiliary units, e.g. subsidiary warehouse, garages and offices in its proximity.

1/ United Nations Statistical Paper's Series M No 57
U.N New York. 1975

Available information indicate that the majority of African countries use the establishment as the basic statistical unit, a few countries use the enterprise instead of the establishment. Most countries treat mixed activities as a single unit classifying them by the main activity on the basis of the proportion of total value of sales.

7. Although the ISIC recommends that activities be classified into wholesale (ISIC 6100) and retail (ISIC 6200), some countries have not been able to make the distinction although they consider it desireable and useful. The reason for this is that not enough data were available. Even in cases where it was possible to make such a distinction, not all the establishments could be classified into ISIC divisions 61 and 62. These establishments are put in a single group covering both wholesale and retail trade. Where wholesale and retail trade establishments are classified separately such classification must be in accordance with the activities carried out by them and be based on the major groups of merchandise sold by these establishments.

8. The following subdivisions are recommended in making such a break-down.

(a) Wholesale trade
- Agricultural raw materials
- Minerals and industrial materials
- Industrial, commercial and agricultural machinery and equipment; motor vehicles
- Hardware and electrical goods
- Furniture and home furnishings
- Textiles and apparel
- Food, beverages and tobacco
- Wholesale trade n.e.c.

(b) Retail trade
- Grocery, wine and liquor stores
- Pharmacies
- Dry goods, apparel and foot-wear stores
- Furnitures and home furnishings stores
- Hardware stores
- Motor vehicles and motorcycles
- Gasolene (petrol) service stations
- Department and variety stores
- Retail trade not elsewhere classified.

9. A number of African countries have practical difficulties in distinguishing wholesale from retail activities as these activities are not infrequently carried on in the same entity and separate data are rarely available for each kind of activity. The ISIC suggested approach is that if each of the various kinds of activity of a given entity is substantial and usually carried on in distinct establishments, then efforts should be made to subdivide it into statistical units which are comparable to the establishment delineated in most instances. In some countries separate data simply do not exist, and the practical solution has been to use the local unit as the statistical unit and the whole entity is put in wholesale and retail trades as one group.

Data to be gathered and published

10. The International Recommendations on Statistics of the Distributive Trades and Services

Sets out the data to be gathered and published by countries beginning to develop, or are in the process of developing, their statistics of the distributive and service trades. (Annex I)

11. Annex II gives a summary view of the data sought by African countries during inquiries on distributive trades. A number of countries conducts census of industrial and distributive-trades statistics, so that data are sought on both subjects during the same inquiry.

12. From Annex II it could be seen that most of the data which are recommended for collection are in fact being collected by countries under some of the following items of data:

(a) Statistical Unit

13. Under this item while it might be easier for countries to limit their coverage of the basic inquiry to establishments which could be easily identified, it would be advantageous to endeavour to include also all units whose activities are not carried out at fixed premises or permanent locations. Examples are hawkers and itinerant traders. They form part of Africa's growing informal sector, although they are in that area of the economy where, not infrequently, no records or accounts are kept. One way of obtaining data on their numbers, etc. is through household surveys. In addition, sample surveys could provide information on their sales, cost of sales, trade margins, etc.

14. As regards location i.e. the place at which the establishment is physically performing its activities, most African countries have identified this item by administrative areas ranging from major divisions or provinces to towns. However, not much attempt has been made to distinguish between economic areas, utilising population density and distribution or geographical pattern of transportation etc.

15. African countries define the size of the establishment primarily in terms of the average number of persons engaged in the establishment during the inquiry period. However, the use of employment figures as the criterion of size necessitates converting part-time workers to their full-time equivalent, particularly in the case of retail trade and services where part-time work is common in the region. In spite of their importance, some countries have not counted family-workers in the number of persons engaged, nor have they attempted to convert part-time workers to their full-time equivalent. Part of the problem lies with family-worker on part-time, some of whom work when they can and for as long as they can, and it is usually difficult to estimate the exact number of hours they have worked. However, where part-time work is common and significant attempt should be made to arrive at some full-time equivalents.

(b) Employment

16. From Annex II it could be seen that all countries collect data on employment i.e total number of persons engaged in a single period of the inquiry. However, not all countries have been able to distinguish between

(i) number of working proprietors
(ii) number of unpaid family workers
(iii) number of employees.

It is recommended that wherever possible, a distinction should be made between (i), (ii) and (iii).

(c) Compensation of employees

17. These items of data are collected by countries with varying degrees of accuracy.

(d) Sales and receipts

18. These items of data are collected by countries with varying degrees of accuracy.

(e) Purchases and other costs.

19. These items of data are collected with varying degrees of accuracy.

(f) Indicators for specific service trades, i.e. restaurants, hotels etc.

20. Not many countries have reported collecting these items of data. While the data might be collected with a high degree of accuracy from registered establishments, a number of these establishments have recently mushroomed in some countries of the African region. Data collected from them are likely to be very unreliable. However, the growth in statistics on tourism will enable improvements to be effected to indicators for specific service trades.

Data Collection-Problems

21. The items of data described above are derived chiefly from the following sources: censuses, establishments which provide and distribute services, sample surveys of trade establishments, censuses of establishments in general, sample surveys of establishments in general, administrative records and specially designed surveys e.g. household surveys. In order to reduce the workload on respondents, especially the small-sized establishments, sample surveys in place of some censuses are recommended. Sample surveys if well planned and carried out could yield good quality data with fewer respondents.

22. The directory of establishments is an indispensable tool for drawing up sample surveys. It is also an important administrative instrument. But a major problems lies with establishing such a directory.

23. The structure of the distribution sector itself is a problem. In the African region, two distinct subsectors in the distributive and service trades can be identified. On the one hand there is the modern sector with an active nucleus centered in the main cities. Although this sector is easily recognized, it is virtually impossible in certain circumstances to distinguish the establishment from the enterprise. The grower may be the processor, and or the vendor as well.

24. On the other hand there are a multitude of small and highly scattered retail shops and outlets supplying their services to rural customers and mostly low-income households in the urban areas. Usually small in size, in aggregate they account for a significant proportion of the goods and services of the distributive-trades sector and its gross margin and value added.

Many small units, e.g. petty traders itinerant traders, barbers, watch repairers, photographers, peddlers, etc. , have no fixed location at which they can be found. Their operations are intermitent or seasonal, often supplementing agricultural or other pursuits. Illegal street trading, a common feature of some African cities is only the tip of the iceberg. Africa's informal sector is growing. Smuggling is part of it. No records or accounts are kept, no taxes or regular wages paid and all transactions are strictly cash, all pervasive, but of crucial economic importance. Coverage is thus likely to be very incomplete, the results obtained meaningless unless exhaustive and expensive census-type activities are carried out to update the directory.

25. Other problems with small retail outlets include their high rate of 'births' and 'deaths' and the level of intelligence of respondents may be a real barrier to communications. In spite of the problems, it is recommended that African countries prepare and put into effect realistic plans for collecting statistical data from the distributive-trades and services sector, particularly from its small unorganized and unregistered units.

26. This is crucial for all developing African countries where small establishments, households and the unorganized sector are making significant contribution to the economy. An accurate head count is likely to reveal Africa's informal sector as one of the biggest sources of jobs even though the question of whether the itinerant trader, peddler, etc, really aid economic development may well be in doubt if one looks at the mass exodus of persons from the rural to the urban areas and its result on Africa's food and agricultural production.

27. Data on the structure and working of the business system particularly the distributive-trades and services sector are essential for accurate estimation of the national accounts, for efficient policy design and planning. Businessmen themselves will benefit in a variety of ways from the data. Distribution statistics will help them to evaluate general economic changes, estimate trends and undertake studies for the identification of potential consumers, etc. and location of markets. As retrenchments and redundancies bite into the number of jobs in the formal sector, so the informal sector swells; more itinerant traders, barbers, watch repairers, and garage proprietors. Statistics on them are needed.

28. Admittedly, the vast number of units engaged in distributive-trades, the absence of complete and reliable directory of such businesses and the fact that so many of them are small units and or family concerns with little inclination to respond quickly or accurately to statistical inquiries are factors which make the collection of statistics in this area an arduous task.

Use of Sampling

29. There are advantages in using sampling techniques in the collection of comprehensive distribution statistics once every five or ten years as well as in monthly, quarterly and annual surveys. Sampling is valuable in gathering data from small establishments, and the set of data recommended to be collected and published by countries beginning to develop, or are in the process of developing, their statistics of the distributive and service trades can be collected in sample surveys. Usually less expensive than censuses, sample surveys if well planned and conducted, yield as good as or even more reliable data than censuses. There are added advantages: the number of respondents in a sample survey is much smaller than in a census, and the returns could be tabulated rapidly and preliminary results published without much time lag, and at reduced cost.

30. However, in conducting sample surveys of distributive-trades and services, care must be taken to ensure that the sample is representative of the population. This will necessitate the use of probability sampling or random sampling. The sample could be designed in such a way that it will yield the required precision at a minimum cost, or conversely, at a fixed cost it will yield estimates of the characteristics desired with the maximum precision possible. A method of selecting a sample often employed in place of random or probability sampling is to choose a sample of establishments which is representative with respect to certain known characteristics of the population. However, in such samples one cannot have an objective measure of the reliability of the sample results because the various establishments may have differing and unknown chances of being in the sample. Although many countries utilize purposive samples, an increasing number are turning to the use of probability samples. Purposive selection is economical for obtaining a sample of given size, both in time and cost, but there is always the possibility that it will lead to faulty results.

31. The large number of retail trade units coupled with high rates of births and deaths make it difficult to maintain a permanent register of them. As already mentioned in this paper, some of these outlets have no fixed location. Each time a census or survey has to be undertaken, a full scale field enumeration has to be undertaken. This is an extremely costly operation, and for this reason it will be to advantage if the census of distribution is timed to coincide with a population census in order that the recording of shop premises, etc. can be done by census of population enumerators.

32. However, some forms of retailing such as mobile shop, street and market trading cannot be covered in this way, because of the itinerant nature of the business, and a variety of sources of information will have to be consulted e.g. records of hawkers' licence holders kept by the police or municipality. In the case of market traders there is a good chance that some data on their numbers could be obtained from the market superintendents' list of daily/ weekly licences issued. However, with itinerant traders the position may be more difficult. These traders may not even be holding permits or licences. Their operations are intermitent or seasonal, coverage is thus likely to be very incomplete.

33. For itinerant business activities as well as family retail trade sampling is the best method of obtaining data. Other sources of data include population censuses, household surveys, municipal and police records. However, the best method of obtaining data on them are through regular sample surveys.

Data to be gathered and published by countries beginning to develop, or in the process of developing, their statistics of the distributive and service trade a/, b/

Item of data	Statistics to be gathered		Statistics to be tabulated according to kind of activity in		Statistics to be tabulated according to size and kind of activity in infrequent inquiries
	Infrequent inquiries	Annual inquiries	Infrequent inquiries	Annual inquiries	
(1)	(2)	(3)	(4)	(5)	(6)
A. Statistical unit					
1. Kind of activity...	1	1			
2. Kind of legal organization and ownership*.....	1				
3. Location*.....	1				
4. Size	1				
5. Number of statistical units.....			1		1
B. Employment					
1. Total number of persons engaged in a single period of the inquiry period	1	1	1	1	
distinguishing:					
a) Number of working proprietors.....	1		1		
b) Number of unpaid family workers..	1		1		
c) Number of employees.....	1	1	1	1	
2. Number of employees engaged in several periods of the inquiry period*....	1	1			

(1)	(2)	(3)	(4)	(5)	(6)
3. Average number of employees engaged in the inquiry period...			1	1	
4. Average number of persons engaged in the inquiry period.....			1		1
C. Compensation of employees					
1. Wages and salaries paid to employees during the inquiry period	1	1	1	1	
D. Sales and receipts					
1. Value of all sales and receipts during the inquiry period.....	1	1	1	1	1
of which:					
a) Sales of goods on own account	1	2	1	2	
b) Commissions received on transactions on account of others	1	2	1	2	
E. Purchases and other costs					
1. Cost of goods purchased intended for sale	1	2	1	2	
F. Gross margin (wholesale and retail)			1	2	
G. Indicators for specific service trades					
1. Number of seats (for restaurants, eating and drinking places, cinemas, theatrical productions and entertainment)	1	2	1	2	

(1)	(2)	(3)	(4)	(5)	(6)
2. Number of rooms (or beds) and occupancy rates (for hotels, motels etc.)	1	2	1	2	
3. Number of admissions (for cinemas, theatrical productions and entertainment)	1	2	1	2	

a/ The recommended scope for the inquiries is wholesale and retail trade, restaurants and hotels (ISIC major division 6) and selected services (parts of ISIC divisions 83, 94 and 95). The recommended statistical unit is the establishment-type unit.

b/ For international purpose, all items of data gathered, except those marked with an asterisk, should be published.

Each item is indicated as of first priority (noted in the annex by "1") or second priority (noted by "2").

Distributive Trades and Industrial Statistics in the African Region

Country	Data sought	Coverage
Algeria	Character of enterprise and its establishments, employment, wages and salaries, expenditure on fixed assets, capacity of installed power equipment, consumption of energy and water, cost and receipts of production, value of stocks (by enterprise questionnaire) and value and quantity of commodities produced and consumed (by establishment questionnaire).	Enterprise with 5 or more employees
Angola	Number of commercial and service establishments, employment and capital.	All establishments
Botswana	Hotel occupancy, employment, earnings, value added, capital formation.	All enterprises
Burundi	Employment, wages and salaries, turnover value of inputs and investment in fixed assets.	Enterprises in Bujumbura
Central African Republic	Employment, wages and salaries, inventories, purchases, production and sales.	....
Chad	Employment, wages and salaries, purchases of raw materials, value of production, stocks and investment.	
Congo	Employment, investment, energy consumption, wages and salaries, purchases and sales	1966 - All enterprises 1973 - enterprises with annual turnover of 40 million Francs and over.
Egypt	Employment, wages and salaries, capital, quantity and value of production.	All establishments
Ethiopia	Number of establishments, and average number of persons engaged, wages and salaries, industrial and non-industrial costs, expenditure on fixed assets, inventories, investment taxes and gross output.	All establishments in urban areas
Gabon	Characteristics of establishment and enterprise, taxes, investment, employment, wages and salaries, production.	All enterprises including handicraft

Country	Data sought	Coverage
Ghana	Characteristics of establishment, employment, turnover, expenditures, current assets, domestic sales and stocks of imported commodities.	1952-1966 All enterprises. Conducted in association with industrial statistics annual survey. Since 1967, establishments with annual turnover of 20,000 Cedis and more
Kenya	Type of organization, labour costs, purchases and stock of goods, other current costs, sales and capital assets.	For 1960 and 1966 establishment with one or more paid employees and with a turnover of over £1000. For 1971 all establishments on the labour enumeration master file
Lesotho	Employment, earnings.	Large establishments in the private sector.
Liberia	Employment, wages and salaries, intermediate consumption, goods purchased, fixed assets stocks.	Private establishments with 20 or more employees
Madagascar	Employment, cost of purchases, electricity consumed, wages and salaries.	All establishments
Malawi	Employment, wages and salaries, value of materials and fuel consumed, value of stocks and capital assets payments for services.	Prior to 1974, establishments with 20 or more workers. Beginning 1974, establishments with annual turnover of 100 thousand Kwacha or more for ISIC groups 71 and 95 and 500 thousand Kwacha or more for ISIC group 6 and 8.
Mali	Employment, wages and salaries, cost of inputs, value of outputs, stock, turnover.	Enterprises with annual turnover of 10 million Francs or more

Country	Data sought	Coverage
Mauritania	Employment, wages and salaries, cost of purchases and sales.	Enterprises with annual turnover of 10 million Francs or more
Mauritius	Employment, wages and salaries, purchases, sales.	All establishments
Niger	Employment, wages and salaries, purchases, sales, stocks, number of hotel occupancy, seating capacity (theatre), etc.	All establishments
Nigeria	Employment, wages and salaries, gross output, gross cost of goods and services sold, operating costs, operating receipts, inventories.	Private establishment engaging 10 or more persons
Senegal	Employment, wages, salaries, cost of production, sales, stock etc.	For 1974 all establishments except handicrafts, For 1975, 500 most important enterprises
Sierra Leone	Employment, wages and salaries, cost of production, sales, stock, etc.	Establishments with 6 or more workers
Sudan	Employment, renumeration of employees, sales, cost of sales.	All establishments including restaurants and hotels.
Swaziland	Employment, wages and salaries, operating surplus, depreciation, indirect taxes, intermediate consumption, capital formation.	For ISIC 61 and 62. Complete enumeration of establishments employing 50 or more persons, 50 per cent sample of establishments employing 10-49 persons and 10 per cent sample of establishments employing less than 10 persons. For ISIC 63 complete enumeration of establishments employing 50 or more persons and and 50 per cent sample of establishments employing less than 50 persons.

Country	Data sought	Coverage
Togo	Employment, wages and salaries, value of gross output and value of inputs.	All enterprises except handicraft
Tunisia	Employment, wages and salaries, investment cost of sales, sales.	All establishments
Uganda	Employment, labour costs (in cash and in kind) receipts from sales, commissions, operating costs, value of stocks, purchases etc.	All enterprises
United Rep of Cameroon	Employment, wages and salaries, turnover.	All enterprises
United Rep. of Tanzania	Employment, wages and salaries, purchases, sales, inventories, fixed assets, etc.	All enterprises
Zaire	Employment, wages and salaries, turnover, purchases, stocks, investment and intermediate consumption.	For production sector, all enterprises operating on the basis of modern accounting system. For commerical sector, enterprise with a turnover of 50 thousand Zaires or more
Zambia	Sales and purchases, stocks, employment and wages and salaries.	All large and medium enterprises and a sample of those with less than 20 employees
Zimbabwe	Characteristics of establishment, sales, receipts from services, purchases, stocks, wages and salaries, sales by commodity groups, creditors and debtors.	All establishments except those whose sales of home produced goods exceeds 50 per cent of total turnover

Source: National Publications and Bibliography of Industrial and Distribution Trade Statistics. United Nations, Statistical Papers Series M. No. 56 Rev. 5.